10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

"Nearleather"
CORRESPONDENCE FOLDER
Letter--No. 1021½
Size 11¾" x 9½" x ¾" Expansion

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

10-3-B-3
~~10-3-5~~
10 - EQUIPMENT - Locomotives - Utah Ry. #1
(Old S. U. 101)

UTAH RAILWAY COMPANY

Salt Lake City, Utah,
July 17, 1939.

A.F.E. No. 823 Eq.

Mr. G. S. Anderson, Pres. & Gen'l Manager,
Utah Railway Company, Salt Lake City, Utah.

Mr. R. J. Vaughan, Superintendent,
Utah Railway Company, Martin, Utah.

Mr. C. E. Beveridge, Div. Engineer,
Utah Railway Company, Martin, Utah.

Dear Sirs:

We are attaching hereto, for your files, one copy of A.F.E. No. 823 Eq., covering the physical retirement and demolishment of Locomotive No. 1, at Martin, Utah.

Yours very truly,

S. A. McCurdy

Secretary

JES:DC
Encl.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form U R 33 12-6-27—2M

UTAH RAILWAY COMPANY

AUTHORITY FOR EXPENDITURE

A. F. E. NO. 823 Eq.

Authority for an expenditure of $ 900.00 is requested for the purpose of retiring one locomotive

on the property owned by Utah Railway Company and

now operated by Utah Railway Company

Martin, Utah, May 15th 1939

Location of project: State Utah Valuation Section 1-Utah

Station or M. P. Martin, Utah.

Description of project:

Physically retire and demolish locomotive 1.

Reasons for recommending this expenditure:

Locomotive is obsolete, being 30 years old, is no longer needed for operations, and is to be retired to reduce maintenance and taxes.

SUMMARY OF ESTIMATE

Estimated gross cost of Project		$ 900
Amount chargeable to:		
Reserve for accrued depreciation for property retired	$ 20711.74	
Profit and loss for property retired		
Operating Expenses for property retired		
Value of Salvage recovered	4183.00	
Cost of property retired	$ 24894.74	
Incidental costs chargeable to profit and loss	900.00	25794.74 Cr
Incidental costs chargeable to operating expenses		
To other accounts		
Net ~~charge~~ Credit to property Investment Account		$ 24894.74

Total Cost to be borne by Utah Railway Company
(Name of Company)

Or participated ~~in by~~
(Name all participants and amount borne by each)

Recommended R J Vaughan
Superintendent

Recommended
Asst. Supt. & Master Mechanic

Expenditure and charge approved and authorized:
(Signed) G. S. ANDERSON
~~(Vice President)~~
PRESIDENT & GEN'L MGR.

Recorded and registered:
(Auditor)

Form U. R. 95 4-27-36 2M.

UTAH RAILWAY COMPANY

A. F. E. NO. 823 Eq.

DETAILED ESTIMATE

Sheet No. 1 of 1 Sheets
Reference
Reference

Office of Division Engineer.

Date Martin, Utah, May 15,1939

Location and Description of Project: Martin, Utah.
Physically retire and demolish locomotive 1.

DETAILED ESTIMATE OF LABOR AND MATERIAL

Property Retired and Not Replaced

Account 51 - Steam Locomotives

Value of locomotive 1			21439.35	
Cost of snow plow front end			3455.39	
Cost of Property Retired			24894.74	24894.74 Cr

Depreciation Reserve

Accrued Depreciation - Equipment		24894.74		

Material and Supplies

Salvage

Value of engine tender	150			
Value of snow plow	2343			
Value of pilot beam	80			
Other usable material	1550			
Scrap	60			
Total Salvage	4183	4183.00 Cr		4183.00
Total Depreciation Reserve		20711.74		20711.74

Account 329 - Equipment - Retirements

Cost of demolishing locomotive	700	200	900.00
Gross Cost			900.00

SUMMARY

Cost of effecting retirement 900.00

Estimated by C E Beveridge (Name) Divn Engineer (Title)

Approved R J Vaughan (Name) Superintendent. (Title)

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form U-R 94—6-19-23—2m

UTAH RAILWAY COMPANY

A. F. E. NO. 239 Ec

AUTHORITY FOR EXPENDITURE

Authority for an expenditure of $ 781.30 is requested for the purpose of locomotive improvement

on the property owned by Utah Railway Company and

now operated by Utah Railway Company

Jan. 25 1924 R J Vaughan

Superintendent

Location of project: State Utah Valuation Section Unallocated

Station or M. P. Locomotive No.1

Description of project:

Installation of steel cab and running boards on Locomotive No.1 in replacement of wood cab and running boards.

Reasons for recommending this expenditure:

Required to make permanent improvement of locomotive.

SUMMARY OF ESTIMATE

Estimated gross cost of Project		$ 781.30
Amount chargeable to:		
Reserve for accrued depreciation for property retired	$	
Profit and loss for property retired		
Operating Expenses for property retired	306.28	
Value of Salvage recovered	10.00	
Cost of property retired	$ 316.28	
Incidental costs chargeable to profit and loss		
Incidental costs chargeable to operating expenses	150.00	
To other accounts		466.28
Net charge to property Investment Account		$ 315.02

Total Cost to be borne by

(Name of Company)

Or participated in by

(Name all participants and amount borne by each)

Recommended J B Primo Master Mechanic

Recommended R J Vaughan Superintendent.

Expenditure and charge approved and authorized:

(Vice President)

Recorded and registered:

(Auditor)

Form U R 95 3-5-23-2M

UTAH RAILWAY COMPANY

A. F. E. NO. 239 Eq

DETAILED ESTIMATE

Sheet No. 1 of 3 Sheets
Reference
Reference

Office of Master Mechanic

Date Jan. 25, 1924.

Location and Description of Project:

Construction and application of all steel cab and running boards on Locomotive No.1 in replacement of present wooden cab and running boards.

DETAILED ESTIMATE OF LABOR AND MATERIAL

Betterments
Property Installed
Acc't 51 - Steam Locomotives

	Steel Cab			
2964#	3/16" sheet steel	@ .066	$177.81	
100#	1½ and 2" angle iron	@ .05	5.00	
32#	1/2 round iron	@ .05	1.60	
36#	1/2 tee iron	@ .05	1.80	
90#	rivets	@ .06	5.40	
200	3/8 x 1" machine bolts	@ .016	3.20	
3	1/4 x 1¼" " "	@ .03	.09	
125	1/4 x 1¼" stove bolts	@ .005	.63	
1	tank oxygen 220 cu.ft.	@ 1.93 C	4.25	
20	pc.3/4x3-3/4x7' ceiling 150'	@50.00 M	7.50	
2	cab arm rests	@ 2.40	4.80	
2	sash 16x27"	@ .93	1.86	
2	doors 14½ x 45-3/4"	@ 1.76	3.52	
2	ventilator windows	@ 1.28	2.56	
8	window slides		3.25	
2	pr 3" butts		.28	
20	1½" No.14 screws		.04	
2	clear vision window frames		6.10	
20	stove bolts 1/4x1½" R.H.		.10	
1	gal. cab green paint		2.18	
3	qts. red mineral paint		1.26	
1	qt. engine varnish		.93	
5#	white lead		.73	
1	gal. black engine paint		1.58	
30'	aluminum leaf		.70	
	20% M.S.E. and freight		47.43	
120	hrs. Boilermaker	@ .74	88.80	
120	" " Helper	@ .53	63.60	
24	" Loco.Carpenter	@ .74	17.76	
24	" " Painter	@ .74	17.76	
	25% Shop Expense		46.98	
	Steel Running Board			
1	Sheet steel 1/4x48x180"		35.00	
1	bar Tee Iron 1/2x1/2x34"		4.00	
50#	Machine Bolts		1.25	
	20% M.S.E. and freight		8.05	
40	hrs. Boilermaker	@ .74	29.60	
40	" " Helper	@ .53	21.20	
	25% Shop Expense		12.70	$ 631.30
		Forward		$ 631.30

Estimated by .... (Name) .... (Title)

Approved .... (Name) .... (Title)

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form U R 95 3-5-23 2M

UTAH RAILWAY COMPANY

A. F. E. NO. 239 Eq

DETAILED ESTIMATE

Sheet No. 2 of 3 Sheets
Reference
Reference

Office of Master Mechanic

Date Jan. 25, 1924

Location and Description of Project:

DETAILED ESTIMATE OF LABOR AND MATERIAL

	Brought forward			$ 631.30
	Property Retired			
118'	B.M. Fir lumber	@ $50.00	5.90	
109'	B.M. Oak lumber	@ 216.00	23.54	
250#	Plate and angle bar iron	@ .066	16.50	
6	1/2 x 3" machine bolts	@ .026	.16	
30	3/8 x 3" " "	@ .018	.54	
2	1/2 x 5" " "	@ .032	.06	
18	1/2 x 6" " "	@ .04	.72	
6	1/2 x 28" " "	@ .15	.90	
12	1/2 x 3½" carriage bolts	@ .02	.24	
2	1/4 x 1" " "	@ .02	.04	
4	1/2 x 3" eye bolts	@ .02	.08	
10#	nails	@ .06	.60	
40	screws	@ .31 gro.	.09	
2#	tacks	@ .06	.12	
2	J.Bolts 1/2 x 7"	@ .05	.10	
1	Roll aluminum leaf	@ .70	.70	
1	Gal. Linseed oil	@ 1.60	1.60	
6	Windows	@ 3.00	18.00	
2	Window frames	@ 1.50	3.00	
2	Clear vision window frames	@ 3.05	6.10	
220'	L. Moulding	@ .01	2.20	
6'	Picture moulding	@ .03	.18	
2	pc.3/8x6'6" rd.iron 5#	@ .066	.33	
2	pr.1½x3½" Butts	@ .05	.10	
9.3 yds.	10 oz. cabvas	@ .65	6.05	
140'	B M Ceiling	@ 50.00	7.00	
2	Marker lamp brackets	@ .26	.52	
2	Doors 14½ x 54"	@ 1.76	3.52	
2	pc. Plate glass 6½x15½	@ .20	.40	
1	pt. Black paint	@ 2.00 gal	.25	
1	pt. Varnish	@ 2.50 "	.31	
1	pt. Turpentine	@ 1.60 "	.20	
1	gal. Green paint	@ 2.60	2.60	
	20% M.S.E. and freight		20.53	
	Replace in kind wood running boards		29.65	
	Labor constructing steel cab		130.76	
	25% Shop Expense		32.69	316.28
	Net charge to investment			315.02
	Salvage Value of Material Recovered			
	Scrap value of material recovered	Cr.	10.00	
	Forward	Cr.	10.00	315.02

Estimated by .... (Name) .... (Title)

Approved .... (Name) .... (Title)

Form U R 95 3-5-22 2M

UTAH RAILWAY COMPANY

A. F. E. NO. 259 Eq

DETAILED ESTIMATE

Sheet No. 3 of 5 Sheets
Reference
Reference

Office of Master Mechanic

Date Jan. 25, 1924.

Location and Description of Project:

DETAILED ESTIMATE OF LABOR AND MATERIAL

Brought forward		Cr. $ 10.00	$ 315.02
Operating Expenses			
Acc't 308 - Steam Locomotive Repairs	$316.28		
Labor removing old cab and running boards	50.00		
Labor applying new cab and running boards	100.00	466.28	456.28
Estimated net cost			$ 771.30

SUMMARY

New Material	$ 332.90
Labor constructing new cab and running boards	298.40
Labor removing old cab and running boards	50.00
Labor applying new cab and running boards	100.00
Estimated gross cost	$ 781.30

Estimated by ______ (Name) Master Mechanic (Title)

Approved R J Vaughan (Name) Superintendent (Title)

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry.

Form U R 94—4-28-21—1m

UTAH RAILWAY COMPANY

A. F. E. NO. 168

AUTHORITY FOR EXPENDITURE

Authority for an expenditure of $ 216.43 is requested for the purpose of betterment of locomotive

on the property owned by Utah Railway Company and

now operated by Utah Railway Company.

October 31, 19 22

R J Vaughan
Superintendent.

Location of project: State Utah Valuation Section 1-Utah

Station or M. P.

Description of project:

Installation of steel pilot beam on Engine No. 1 to replace the present oak beam.

Reasons for recommending this expenditure:

The wooden beam with which this engine is equipped is in an unsafe condition and its replacement with a steel member is considered advisable.

SUMMARY OF ESTIMATE

Estimated gross cost of Project		$ 216.43
Amount chargeable to:		
Reserve for accrued depreciation for property retired	$	
Profit and loss for property retired		
Operating Expenses for property retired	35.00	
Value of Salvage recovered		
Cost of property retired	$ 35.00	
Incidental costs chargeable to profit and loss		
Incidental costs chargeable to operating expenses	45.00	
To other accounts		80.00
Net charge to property Investment Account		$ 136.43

Total Cost to be borne by Utah Railway Company
(Name of Company)

Or Participated in by
(Name all participants and amount borne by each)

Recommended J B Sims Master Mechanic

Recommended R J Vaughan Superintendent.

Expenditure and charge approved and authorized:
(Signed) G. S. Anderson
(Vice President)

Recorded and registered:
(Auditor)

Form U R 95—4-28-21—1m

UTAH RAILWAY COMPANY

A. F. E. NO. 168

DETAILED ESTIMATE

Sheet No. 1 of 1 Sheets
Reference
Reference

Office of Master Mechanic.

Date Oct. 31, 1922.

Location and description of project:

Installation of steel pilot beam on Engine No. 1 to replace the present oak beam.

DETAILED ESTIMATE OF LABOR AND MATERIAL

Betterments:

Property Installed:

Acct. 51 - Steam Locomotives:

1 new Steel pilot beam		$149.47
Miscellaneous material		10.00
7½% M. S. Expense		11.96
		$171.43

Property Retired:

Oak pilot beam retired:

1 pc. 12" x 16" - 10' milled & finished		25.00
Miscellaneous material		10.00
		$ 35.00 Cr.
Net charge to investment		$136.43

Salvage Recovered:

None.

Operating Expenses:

Acct. 308 - Steam Locos. - Repairs	$35.00	
Labor removing old beam	4.45	
Applying new beam	33.87	
Shop Expense	6.68	80.00
Estimated net cost		216.43

SUMMARY

New material	$ 171.43
Labor removing old beam	4.45
Labor applying new beam	33.87
Shop expense	6.68
Estimated Gross Cost	$216.43

Estimated by J B Simo (Name) Master Mechanic (Title)

Approved (Name) Superintendent. (Title)

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101)

October 30, 1922

Mr. R. J. Vaughan, Superintendent,
Utah Railway Company,
Hiawatha, Utah.

Dear Sir:

Referring to your letter of 28th instant.

This will be your authority to replace present oak breast beam on engine 1, with steel beam, the total cost being estimated at $151.11, and you may proceed with the work as soon as convenient.

Regular A. F. E. will be prepared to cover.

Yours very truly,

(Signed) G. S. Anderson

Vice-Pres. & General Manager.

CC - Mr. V. B. Hjortsberg.
Please have A. F. E. prepared.

FORM U.R. 44 6-1-22 5M

UTAH RAILWAY COMPANY

UTAH RAILWAY
RECEIVED
OCT 30 1922

Hiawatha, Utah
Oct. 28, 1922.

Mr. G. S. Anderson,
Vice-Pres. & Gen. Mgr.,
Utah Railway Company,
Salt Lake City, Utah

Dear Sir:

The present pilot and breast beam now of oak on Engine 1 is in an unsafe condition and we find that it be necessary to remove and replace same at once.

Master Mechanic desires to replace with steel beam, cost of beam being $119.75 and cost of labor, two carmen 16 hours each @ 63¢ per hour, $20.16, 1 machinist 16 hrs @ 70¢ per hour, $11.20, total $151.11.

Will you kindly authorise this improvement and advise so that we can go ahead with the installation.

Yours very truly,

C J Kirkham
for
Superintendent.

V/c.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C. V. #101).

COPY

Eng-No. 1

UTAH RAILWAY COMPANY
Salt Lake City, Utah

August 15, 1919

Mr. G. S. Anderson,
Vice Pres. & Gen. Manager,
Utah Railway Co.,
Building.

Dear Sir:

Referring to your three letters of the 9th instant. We are attaching herewith two photostat copies of the specifications covering your consolidation locomotive No. 1 and one photostat copy each of specifications for your consolidation locomotives Nos. 3 and 4.

Yours very truly,
(Sgd) A. P. Stone
ENGINEER

Encls.

August 9th

1919

Mr. O. J. Egleston, Chief Engineer,
Utah Railway Company,
Building.

Dear Sir:

I enclose herewith copy of specification covering our consolidation locomotive No. 1.

Will you please have two photostat copies made of this specification and send to me.

Yours very truly,

(Signed) G. S. Anderson

A-M

10-3-B-3 - EQUIPMENT - Locos.

UTAH RAILWAY COMPANY
OPERATING DEPARTMENT
PROVO, UTAH

J. E. STEVENSON.
SUPERINTENDENT AND MASTER MECHANIC

BE SAFE ALWAYS
UTAH U.C.R. RAILWAY

August 7th
1919

UTAH RAILWAY COMPANY,
RECEIVED
AUG 9 1919

Mr. G. S. Anderson,
Vice Pres. & Gen. Mgr.,
Utah Railway Company,
Salt Lake City, Utah.

Dear Sir:

The attached specifications cover our locomotive No. 1. Would appreciate a copy of these specifications for my file.

The discrepancies in the manufacturer's weight on drivers and actual scale weights apparently was brought about by that company giving the actual weight on the engine without water in the boiler, whereas engine was weighed with two gauges of water on the Hiawatha scales.

Respectfully,

J E Stevenson
Superintendent.

JES*PC

July 14th

1919

Mr. W. E. Woodard, Vice President,
Lima Locomotive Works, Inc.
Lima, Ohio.

Dear Sir:

This will acknowledge receipt of and thank you for your letter of July 9th, enclosing specifications of our locomotives Nos. 101 and 102.

Yours very truly,

(Signed) G. S. Anderson

A-M

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

GENERAL OFFICE AND WORKS
LIMA, OHIO.

NEW YORK OFFICE
30 CHURCH ST.

LIMA LOCOMOTIVE WORKS INCORPORATED

W. E. WOODARD, VICE PRES'T.
H. W. SNYDER, MECH'L ENGR.

LIMA, OHIO.

IN REPLY
REFER TO

UTAH RAILWAY COMPANY,
RECEIVED
JUL 14 1919

July 9th, 1919.

COUPON BOND

Mr. G. S. Anderson, Gen. Mgr.,
Utah Railway Company,
Salt Lake City, Utah.

Dear Sir:-

We are in receipt of your letter of May 8th, and also your follow up letter of July 3rd, requesting that we furnish you with specifications for your Locomotives Road Nos. 101 and 102, our Shop Nos. 1106 and 1127.

We have not answered this earlier owing to the fact that we had no specifications prepared for these engines and it was necessary for us to hunt the information up from our records. We have just succeeded in completing this and are sending you herewith two blue print copies of this specification, one for each of the engines in case your files are kept separate.

We trust that this will answer your purpose and that this delay has occasioned you no inconvenience.

Yours very truly,

W. E. Woodard
Vice President.

CFR:OCD

BOND COUPON

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form L. S. A. 2.

LIMA LOCOMOTIVE WORKS, Incorporated

LIMA, OHIO, U. S. A.

SPECIFICATION NO. PLAN NO. 1106 19

OF A 2-8-0- LOCOMOTIVE AND 8 WHEEL TENDER

FOR

CONDITION OF OPERATION

Gauge of track 56-1/2" Weight of rail - - - Maximum grade - - Length - -

Maximum curve - - - - - Is curve compensated - - -

LIMITATIONS

Of height, measured from top of rail to top of 14' 11-3/8" Tank manhole - - -

Of length, total wheel base 52' 7-1/2" Width 10'-2"

Weight on leading truck	19,000 lbs.	Approximate weight in working order
Weight on drivers	129,000 lbs.	
Weight on trailing truck	- - - - - -	
Weight, total	148,000 lbs.	
Weight of tender	104,925 lbs.	

Cylinders, diameter 20" stroke 24"

Driving Wheels, diameter 50"

Wheel base, driving 15'-0"

Wheel base, locomotive 23'-0"

Tractive Power 32,600 lbs.

Factor of adhesion 3.95

Fuel coal

Fuel capacity 10 tons

Water Tank capacity 5000 gallons

Boiler, diameter 62-3/8"-70" pressure 200, lbs.

Boiler, type Ext. wagon top radial stayed

Firebox, length 90" width 66"

Tubes, number 250

Tubes, diameter 2" length 14'-0"

Heating surface, (in sq. ft.) firebox 128.07

Heating surface, (in sq. ft.) tubes 1823.47

Heating surface, (in sq. ft.) total 1951.62

Superheating surface - - - -

Grate area, sq.ft 41.25

BRAKE

Locomotive fitted with Westinghouse American outside equalized air Brake

6 E T Equipment One 11" Pump

Tender Brake Equipment 6 E T Train pipe at front of engine and rear of tender.

50,000 cu.in. main reservoir capacity.

DRAFT GEAR

Front of locomotive to be fitted with Tower Radial in C.S. pocket.

Rear of tender to be fitted with Tower shank with Westinghouse Friction. draft gear

Height of center of coupler above rail 34-1/2"

Snow plow to be applied.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form ED-187

BOILER AND BOILER FITTINGS

Boiler Boiler extended wagon top - radial stayed type, outside diameter of waist at front end 62-3/8" largest course 70" diameter, material of homogeneous open hearth steel.

Working pressure 200 pounds per square inch. Test pressure 25 per cent above working pressure.

Thickness of plate 1st course 5/8" 2nd course 3/4" 3rd course 3/4"

throat 3/4" roof and sides 9/16" back head 9/16" front tube 1/2"

All firebox seams caulked inside and outside; boiler seams caulked outside only. All holes reamed perfectly true after sheets are put together. No hand riveting permitted except where it is impossible to use power riveters.

Boiler to be well designed, substantially riveted, braced in all parts, and amply strong.

Seams Horizontal seams riveted butt joint; circumferential seams riveted double lap.

Tubes Tubes of seamless steel .12" thick, 250 in number, 2" outside diameter 14'-0" long, spaced in vertical rows and set with copper ferrules and swedged, rolled and beaded on firebox end and rolled in tube sheet.

Flues Flues of - - - - - - thick - - - - in number outside diameter - - - - - long, set with copper ferrules, swedged, rolled and beaded on firebox end, and rolled in front tube sheet.

Firebox Firebox wide type, length 90" width 66"; crown sheet and side sheet 3/8"; tube sheet 1/2" back sheet 3/8" Firedoor elliptical, sheets protected from wear by guard cast on fire door frame. Water space front 5" inches, sides 4 inches, rear 4 inches.

Mud ring 3-1/2 inches thick double riveted.

Firedoor Firedoor Elliptical. Sheets protected from wear by guard cast on firedoor frame

Staybolts Crown sheet supported by radial stays 1-1/8 inches diameter.

Expansion stays 2 front rows 6 rows each side of center

Staybolts in sides, throat and backhead 1 inches diameter.

Flexible staybolts - - - -

~~Firebrick~~ Tell Tale holes in staybolts.

Dome Dome located ahead of firebox.

Smokebox Smokebox made separate for easy renewal, to have extension front end and fitted with defelctor netting and cleaning holes.

Material 1/2 inches thick.

Throttle and Steam Pipes Throttle pipe, and steam pipes of cast iron with ball joints.

Dry pipe of wrot iron pipe with C.I. ends.

Grates Grates of cast iron, suitable for fuel. Rocking and dump. Dump at front of firebox.

Stack Stack straight style, material cast iron

Ashpan Ash pan of steel plate with suitable dampers or air inlets.

Smoke box front and door of pressed steel.

Spec. No.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form ED-187

Lagging Boiler lagged with Magnesia sectional lagging and neatly jacketed, dome lagged and cased, except when through saddle tank

Cleaning Holes Cleaning plugs located where necessary for proper cleaning of boiler

Blow-off Cock Blow off cock as specified

Injectors Two approved #9 Ohio "A" 2" pipe injectors. Tee in each branch pipe ahead of cab.

Injector checks 2-1/2" Powell

Safety Valves One 3-1/2" Plain Kunkle / One 3-1/2" Muffled / pop safety valve.

Gauges Ashcroft steam gauge, 3/4" glass water gauge, three gauge cocks.

Water gauge with "Iron Clad" protector.

~~**Superheater**~~

FRAMES, CYLINDERS, ETC.

Frames Frames of open hearth cast steel thoroughly annealed 4 inches wide to have single front ends securely bolted and keyed to main frame and provided with lugs for holding cylinders. Frames thoroughly braced together and to boiler by suitable castings, braces, expansion plates and pads. Pedestals protected from wear by cast iron shoes and adjustable wedges.

Cylinders Cylinders 20 inches in diameter 24 inches stroke. Cylinders cast half saddle whenever possible, and interchangeable right and left, made of close grained cast iron; barrel to be of such thickness as to permit of boring out when worn; when slide valves are applied, valve seats are raised to allow for refacing; accurately planed, fitted and bolted together, and bolted and keyed to frame. Wreckage groove in front cyl. heads.

Lubrication Cylinders oiled by Chicago C Triple 3 pint. automatic sight-feed lubricator placed in cab, and connected to steam chests by copper pipes.

Pistons Pistons of cast steel and fitted with approved form of cast iron packing rings.

Piston Rods Piston rods made of steel and inches diameter, accurately turned, properly fitted, and securely fastened to pistons and crossheads.

Valves Steam chest valves balanced slide

Rod Packing Lima metallic packing on piston rods and valve stems.

Valve Motion Stephenson link motion, graduated to cut off equally at all points of stroke. Links, sliding blocks and all wearing surfaces to be case hardened. All pin bearings to have case hardened steel pins and bushings. Power reverse gear - - - -

Eccentrics Eccentrics of cast steel Eccentric straps of cast steel, bronze liners.

Guides Guides of Hammered iron securely bolted to cylinder heads and to rigid guide yoke extending across frames.

Crossheads Crossheads Alligator type of cast steel with ample wearing gibs of bronze

DRIVING WHEELS, RODS, ETC.

Driving Wheels Driving wheels, number 8, outside diameter 50 inches, centers turned 44 inches diameter, carefully proportioned and accurately counterbalanced. Main of cast steel others of cast steel

Spec. No.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form ED-187

Tires Tires of 3 inches thick.

Flanged tires on all wheels 5-1/2 inches wide.

Plain tires on - - - - - - - - - - inches wide.

Tires held on by shrinkage. Sections to be Master Mechanics standard tread and flanges.

Axles Driving axles of hammered steel.

Main journals diameter 8-1/2", length 10"

others, diameter 8" length 10"

Boxes Driving boxes of cast steel with bronze bearings and cast iron oil cellars

Boxes babbitted.

Springs Driving springs of best quality steel, properly equalized to insure engine riding in best possible manner.

Rods Main rods fitted with two piece brasses and keys, and rear ends forked ~~on strap~~ style with keys finished all over.

Parallel rods with solid ends - finished all over

Crank Pins Crank pins of steel with ample wearing surfaces.

Lubrication All bearings on engine provided with suitable means for their proper lubrication. Rod cups forged on solid.

Rod cup style grease

ENGINE TRUCKS

Leading Truck Frame of cast steel Engine truck boxes of cast iron, boxes working in suitable pedestals with approved arrangements of equalizing beams and springs.

- - - -

Trailing Truck - - - -

Springs Springs of best quality.

Leading Wheels Leading wheels number 2 outside diameter 30 inches, kind of wheels C.I.Spoke ctr. steel tired 5½" x 2½"

52-1/4" between hubs Axles of hammered steel. Journals 5½"x10"

retaining rings

Trailing Wheels Trailing wheels number - - outside diameter - - inches, kind of wheels - -

- - Axles of hammered steel. Journals - -

CAB, PILOT AND FIXTURES

Cab Cab built of oak or ash with wood roof covered with canvas thoroughly braced and secured to boiler and running boards, furnished with suitable sliding windows, sash of hardwood with double strength glass, and ventilator in roof. Convenient seats with cushions and tool boxes for engineer and fireman Also provided with arm rest and cab curtain. Rear cab windows, stationary .

Fuel Box on LS.

Front Bumper Bumper wood

Running Board Running boards of wood

Pilot Pilot of wood bound with iron Front of engine and rear of tender.

~~**Step Boards**~~ ~~Front step boards~~ With 8" Plank step boards. rear step boards

Cab Lamps Dayton

Water Gauge Lamps Dayton

Spec. No.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form ED-187

Sand Box One sand box of ample capacity arranged with air & hand valves and pipes.

Lima Sander to front and rear drivers.

Headlight Headlight 2 - 16" Round case

Fixtures Engine furnished with bell, headlight support 5" Plain whistle, blower and cab lamps.

Bell Ringer Bell ringer Golmar 100 lbs. bell.

Tools Tools and accessories to include all necessary wrenches and spanners, one hard and one soft hammer, monkey wrench, a cold chisel, three oil cans, slicebar, ash hoe, shaker, two jack screws.

Alexander frog and wedge. Heavy size.

Templates Principal parts of engine fitted to gauges and templates, and interchangeable.

Bolts All bolts of U. S. Standard thread.

Taps All cocks fitted to standard gas pipe taps, unless otherwise specified.

Hand Rails Hand rails of iron conveniently arranged and securely fastened.

" " 1-1/4" iron pipe.

TENDER

Type Type 8-wheeled

Weight with water and fuel 104925

Frame Frame to be built with 10" center and 10" side and end channels. secured at corners by steel angles; the whole substantially constructed and thoroughly braced to preserve original form.

Bolster Frame bolster wrot iron and steel

Trucks Frame carried on 4-wheeled trucks with steel bolsters and channel spring planks.

Wheels Wheels 33" inches outside diameter 5-1/2" x 2-1/2" steel tired

Axles Axles of steel with 5" x 9" M.C.B. journals.

Brake Brake on both trucks with suitable brake beams.

Springs Springs of best quality Elliptic

Tank Tank style water bottom with straight top with angle iron frame substantially braced; top and bottom plates 5/16"&3/8" inches thick; outside 1/4 inches thick; inside 3/8 inches thick. Tank provided with tank valves and strainers and cleaning holes. Drain pipes in top of tank.

Water capacity 5000 U. S. gallons (231 cu. inches)

Fuel capacity 10 tons 4" Siphon.

2" Iron Gate Valve on L.S. of tank rear bottom 2 feet from back end.

Tool Boxes Tool boxes of on top of tank and at rear.

GENERAL FINISH

General Finish Engine and tender to have plain finish, suitable for the service and to be lettered as directed by purchaser.

Jacket Boiler jacket of painted steel

REQUIREMENTS

~~**Patents**~~ [illegible]

~~**Material Specifications**~~ [illegible]

~~Society for Testing Material~~

Spec No.

July 3rd

1919

Lima Locomotive Works,
Lima, Ohio.

Gentlemen:

Under date of May 8th, I wrote you as follows:

> "Recently this company acquired locomotives road numbers 101 and 102 from the Castle Valley and Southern Utah Railroads, your numbers 1106, built 1909, and 1127, built 1910, respectively. In order that our files may be complete, will you kindly send to me as early as convenient one copy of the specifications covering each of these engines."

We have no record of having received a reply and would ask that you kindly furnish the information requested.

Yours very truly,

(Signed) G. S. Anderson

A-M

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

May 8th,

1919.

Hold in file for reply

Lima Locomotive Works,
Lima, Ohio.

Gentlemen:

Recently this company acquired locomotives road numbers 101 and 102 from the Castle Valley and Southern Utah Railroads, your numbers 1106, built 1909, and 1127, built 1910, respectively. In order that our files may be complete, will you kindly send to me as early as convenient one copy of the specifications covering each of these engines.

Yours very truly,

(Signed) G. S. Anderson

A/S

GENERAL OFFICE AND WORKS
LIMA, OHIO.

NEW YORK OFFICE
30 CHURCH ST.

LIMA LOCOMOTIVE WORKS INCORPORATED

W. E. WOODARD, VICE PRES'T.
H. W. SNYDER, MECH'L ENGR.

Eng #1

LIMA, OHIO. July 21, 1919.

IN REPLY REFER TO

UTAH RAILWAY COMPANY
RECEIVED
JUL 25 1919

Mr. G. S. Anderson,
Utah Railway Co.,
Salt Lake City, Utah.

Dear Sir:-

I have received your letter of July 15th, with which you enclosed copy of specification 1725, and request that we advise you the manufacturer's ~~name~~ number and road No. of locomotives covered by this specification.

On July 9th, we wrote you furnishing you with two copies of specification covering locomotives No. 101 and 102, our shop Nos. 1106 and 1127. These specifications were made up ~~for~~ from our records and show the locomotives as they were constructed. The specification which you returned with your letter of the 15th, was evidently made up from the original contract specification covering the above engines. There are a few discrepancies between this specification and the ones we sent you on the 9th. These engines No. 101 and 102 were duplicates and the same specification will apply to both, and if you will use the ones furnished you with our letter of the 9th, and destroy the one sent us with your letter of the 15th (which we are enclosing) you will have a correct record for the engines in question.

We trust this will straighten the matter out satisfactorily for you.

Yours truly,

W. E. Woodard

CR/GS

Vice President.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

LOCOMOTIVES

THE LIMA LOCOMOTIVE & MACHINE CO.
LIMA, OHIO

void

Form No. L. S. A. 2.

THE LIMA LOCOMOTIVE AND MACHINE CO.,

LIMA, OHIO, U. S. A.

SPECIFICATION NO. 1725 OF A CLASS 2-8-0 LOCOMOTIVE AND 8 WHEEL TENDER

CODE WORD ……, PAGE …… OF CATALOGUE NO. ……

FOR ……

CONDITIONS OF OPERATION.

Gauge of track 56 1/2" Weight of rail …… Maximum grade …… Length ……

Maximum curve …… Height of center of coupler above rail 34 1/2"

Is curve compensated ……

LIMITATIONS.

Of height, measured from top of rail to top of stack 14' 8" Tank manhole ……

Of length, total wheel base …… width 10' 4"

Of weight, per axle 33500, on drivers 134000, total 153000

✓ Cylinder, diameter	20"	Weight in working order	153000
✓ Cylinder, stroke	24"	Weight on leading truck	19000
✓ Driving wheel, diameter	50	Weight on drivers	134000
✓ Boiler, diameter	62 3/8"-71 1/8"	Weight on trailing truck	
✓ Boiler, pressure	200 lbs	Weight of tender loaded	104300
✓ Firebox, length	90	Heating surface (in sq. ft.) firebox	132.74 Approx
✓ Firebox, width	66"	Heating surface (in sq. ft.) tubes	1823.47
✓ Tubes, diameter	2"	Heating surface (in sq. ft.) total	1956.21
✓ Tubes, number	250	Grate area, sq. ft.	45
✓ Tubes, length	14' 0"	✓ Tractive power	32600
Wheel base, driving	15' 0"	Factor of adhesion	4.11
Wheel base, locomotive	23' 0"	Water tank	5000 gallons capacity.
Wheel base, locomotive and tender	about 53' 0"	Fuel capacity	20000 lbs
Fuel	Coal		

BRAKE
Locomotive fitted with Westinghouse American Outside Equalized XXXXXXXX Air Brake.
Schedule A1. ET Equipment, with 11" pump.
Tender Brake Automatic Air ET Equipment.
Train Pipe at both ends of locomotive.
XXXXXXXXXXXXXXXXXXXXXXXXXX 50000 Cu.in.Main Reservoir Capacity

DRAFT GEAR
Front of locomotive and rear of tender to be fitted with ……
…… coupler. See below

Tower radial coupler in cast steel packet on pilot, Tower shank coupler with Westinghouse friction draft gear on tender.

Void see letter 7/21/19 Lima Loco Works

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form L. S. A. 2.

MACHINERY

CYLINDERS

Wreckage groove on front cylinder heads

Cylinders 20 inches in diameter 24 inches stroke

Cylinders cast half saddle and interchangeable right and left, made of close grained cast iron; barrel to be of such thickness as to permit of boring out when worn; valve seats raised to allow for refacing accurately bolted together, and bolted and keyed to frame.

Packing Lima Metallic Valves, ~~Piston~~, Balanced Slide, ~~[illegible]~~

Piston rods of accurately turned steel; pistons of cast iron with cast iron packing rings. Cast iron steam chests with covers of iron cased with iron. Cylinders lagged with ~~wood~~ Magnesia with ~~[illegible]~~ steel casings and planished iron jackets.

DRIVING WHEELS

Driving wheels 8 in number 50 inches outside diam.; centers of cast steel, ~~[illegible]~~turned 44 inches outside diam.; tires 3 inches thick; All flanged 5 1/2 inches wide; plain inches wide; tires held on by shrinkage. Tire sections to be Master Mechanic's standard tread and flanges. Hub liners cast iron bronze.

Driving axles of hammered steel with journals Main 8 1/2 Others 8 inches diameter 10 inches long.

Driving boxes of cast Steel with bronze bearings and cast iron oil cellars; cast iron shoes and wedges to take up wear and protect frames. Boxes babbitted

Springs of best quality, properly equalized.

Crank pins of steel.

RODS

Main rods with solid front ends, fitted with two piece brasses and keys, and rear ends forked ~~strap~~ style with keys. Finished all over

Parallel rods with solid ~~strap~~ ends. Finished all over

Rod cups forged on solid

Rod cups style ~~plunger oil cups~~ grease cups.

CROSSHEADS

Crossheads alligator ~~Laird single bar~~ type of cast steel with bronze, ~~babbit~~ wearing gibs. ✓

Guides of hammered iron alligator ~~Laird single bar~~ type. Case hardened. ✓

VALVE MOTION

Shifting link motion, graduated to cut off equally at all points of stroke. ✓

Links designed to facilitate taking up wear.

Links, sliding blocks and all wearing surfaces to be case-hardened. All pin bearings to have case-hardened steel pins and bushings.

Eccentrics and straps of cast steel with bronze liners

ENGINE TRUCKS

Front truck cast steel frame 2 wheels 30 inches outside diam.; kind of wheels cast iron spoke center with steel tires, ~~chilled flange and tread~~ 5 1/2" X 2 1/2", ~~[illegible]~~ 52 1/4" between hubs M. M. Standard. 5 1/2" X 10" Journals

~~Trailing truck~~ ~~frame~~ ~~wheels~~ ~~inches outside diam.~~

~~kind of wheels~~ ~~spoke center with steel tires, chilled flanges and tread M. M. Standard.~~

Form L. S. A. 2.

ENGINE FRAME

To be of cast steel; .....4..........inches wide; to have single, ~~double~~ front ends, to be securely crossbraced and bolted to cylinders and to have taper keys in front of cylinders; to have expansion pads on frames at fire box to provide for expansion and contraction.

....

....

BOILER AND DETAILS

Of homogeneous open-hearth steel, shell of best flange grade fire box steel.

Working pressure..200.....lbs. Test pressure 50 lbs above working pressure. Type ~~straight or~~ extended wagon top radial stayed, diameter at first course ..62 3/8.....inches, diam. at wagon top ...71 1/8...inches. Material: 1st course...5/8" 3/4" & 9/16"...inches; 2nd course ....inches.

Smokebox made separate for easy renewal, to have extension front end and fitted with deflector, netting and cleaning holes, ~~or petticoat pipe and low exhaust pipe~~..............................

....

Flues ..250.......in number of the best steel seamless tubing, ~~charcoal iron~~ external diam. ..2.... inches, thickness .12" thick ~~No. 11, 12, 13, B.W.G.~~ length over sheets .....14.....feet.....0.......inches, spaced in vertical rows and set with copper ferrules and swaged, rolled and beaded on firebox end and rolled in front tube sheet. Tell tale holes in stay bolts

Firebox type ~~between frames, over frames, back of drivers~~, wide type.

Firebox length ..90........inches; firebox width.....66.......inches. Crown sheet supported by radial stays...1 1/8........inches diam. Stay bolts in sides, throat and back head...1"......... inches diam. Dome located ahead of firebox.

Fire door elliptical, sheets protected from wear by guard cast on fire door frame. Water space front ...5........inches, sides ...4........inches, rear .....4.......inches. Mud ring...3 1/2..... inches thick, ~~single~~, double riveted. Liners in boilers for expansion pad studs. ✗

Horizontal seams riveted butt joint, ~~[illegible]~~ Circumferential seams riveted double lap, ~~[illegible]~~.

Boiler to be well designed, substantially riveted, braced in all parts and amply strong.

Throttle pipe, and steam pipes of cast iron with ball joints. Dry pipe ~~[illegible]~~ of wrought iron pipe with cast iron ends. Dump grate at front of firebox

Grates, type rocking and dump plain ashpan with dampers. Stack ~~[illegible]~~ material cast iron, ~~steel~~

Boiler lagged with Magnesia sectional lagging and jacketed with planished iron; dome lagged, and cased, except when through saddle tank. Boiler front and door of ~~[illegible]~~ pressed steel ....

.......................Rear cab windows stationary.....................

CAB

Cab to be of Oak or ash wood, ~~steel~~ with wood, ~~steel~~ roof covered with...Canvas.... Style, rear entrance.

Sash of hardwood with double strength glass; ventilator in roof; and hand rails of ~~[illegible]~~ 1¼" iron pipe ....

PILOT

Front pilot of wood, bound with iron. With 8" plank step boards

Rear pilot of wood, bound with iron.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Form L. S. A. 2.

XXXXXXXXXXXXX .... XXXXXXXXXXXX ....

XXXXXXXXX ....

....

ENGINE FITTINGS OUTSIDE

Engine furnished with bell. and ..... ringer, sand box . Front & rear. sander, air and hand,

2-16" .... inch, XXXXXXXXXXXXXXXXXXXXXXX headlight.

XXXXXXXXXXX .... XXXXXXXXXX ....

Water glass protector "Iron Clad" .... type 5" . Plain XXXX whistle, pushpole pockets

Tee in each branch pipe ahead of cab ....

....

ENGINE FITTINGS INSIDE

#9 Ohio A .... Two approved .... injectors with cocks. Ashcroft

1-3 1/2" Plain .... steam gauge and cock, glass water gauge, three gauge cocks 1-3 1/2" Muffled Kunkle

pop safety valves. Chicago Triple C .... 3 Pints XXXXXXXX lubricator and cock, steam turret.

Engineer's brake valve, throttle lever and reverse lever placed in convenient position in cab.

Cab to have two seats with cushions, or seats and cushions for engineer and fuel box on left side.

..... Arm rests ....

....

TOOLS

Tools and accessories to include all necessary wrenches and spanners, one hard and soft hammer monkey wrench, a cold chisel, three oil cans, slicebar, ash hoe, shaker, three jack screws, frog and wedge ....

TANKS AND COAL BUNKER

Tank to be .... of .... gallons capacity.

....

....

....

Tank provided with tank valves, strainers and cleaning holes.

Coal bunker to be .... of .... pounds capacity, to be located ....

....

....

....

....

FINISH

Engine and tender to have plain finish, suitable for the service, and to be lettered as directed by purchaser.

GAUGES AND THREADS

All parts requiring renewal, machined to standard templates and gauges and perfectly interchangeable.

All bolts of U. S. standard thread; all cocks fitted to standard gas pipe taps.

Locomotive to be fired up and worked by its own steam before leaving shop.

TENDER AND TANK

Type 8-wheel . capacity water ... 5000 .... gallons; fuel ..... 20000 lbs .....

Form L. S. A. 2.

Weight with water and coal 104300 Frame to be built with 10 center and 10 side and end channels, XXXXX secured at corners by steel angles; the whole substantially riveted, XXXXogether and thoroughly braced to preserve original form; frame bolster wrought iron and steel XXXX

frame carried on 2 4-wheel trucks with cast steel, XXX bolsters and channel XXX spring planks. Wheels 33" inches XXXXXXXXX Steel tired

Axles of steel with journals 5" X 9" M C B

Springs of best quality, XXX elliptic, XXXXXXXXXXX

Tank style Water bottom with Straight top with angle iron frame substantially braced; ✓ top and bottom plates 5/16 & 3/8 inch thick, outsides 1/4 inch thick, inside 3/8 inch thick. Tank provided with tank valves and strainers and cleaning holes. Drain pipes in top of tank

4" Siphon

2" Gate valve on L. side tank at bottom 2' from rear end

FITTINGS

Steps at corner of tender of iron. Hand rails of iron pipe.

Tool boxes on top of tank, and at rear.

DRAFT GEAR

Front end of tender to be fitted with drawbar pockets secured to frame.

Rear end to be fitted with M. C. B. coupler or to suit purchaser.

PATENTS

Builders of this locomotive will not assume responsibility for patented appliances specified by purchaser, and all patent fees on appliances so specified excepted.

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

Linia spacer

July 15th,

1 9 1 9

Live file

Lima Locomotive Works, Inc.
Lima, Ohio.

Gentlemen:

I enclose herewith copy of your specification No. 1725 covering a locomotive built for either the Castle Valley or Southern Utah Railroad.

Can you advise me the manufacturer's number and road number of the locomotive covered by this specification.

We recently acquired all the locomotives of the Castle Valley and Southern Utah Railroad Companies, and are endeavoring to straighten out the specifications covering them.

Yours very truly,

A-M

(Signed) G. S. Anderson

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

UTAH RAILWAY COMPANY
OPERATING DEPARTMENT
PROVO, UTAH

J. E. STEVENSON
SUPERINTENDENT AND MASTER MECHANIC

May 12th
1919

UTAH RAILWAY COMPANY
RECEIVED
MAY 14 1919

BE SAFE
UTAH
U.C.R.
RAILWAY
ALWAYS

Mr. G. S. Anderson,
Vice Pres. & Gen. Mgr.,
Utah Railway Company,
Salt Lake City, Utah.

Dear Sir:

Your letter of May 8th with reference to discrepancies with reference to Manufacturer's number of our eng ine 1.

While the specifications that you sent to this office for checking in every way conform to engine 1, it is evident that if the specifications you forwarded to me were for one of the Lima engines, it must have covered the construction of engine 100 or 103, as I have called Mr. Rosser up on the 'phone and had him check the Manufacturer's number on the number plate and he advises that it is 1106, therefore the information I gave you to the effect that engine 1's Manufacturer's serial number was 1725 is in error.

Respectfully,

J E Stevenson
Superintendent.

JES*PC

May 8th,

1 9 1 9.

Mr. J. E. Stevenson, Superintendent,
Utah Railway Company,
Provo, Utah.

Dear Sir:

Referring to your letter of April 4th in regard to specification No. 1725 of the Lima Locomotive Company and which you state covers our engine No. 1.

I note you state that the manufacturer's number on engine No. 1, is 1725, whereas I find a letter in our files from you, dated November 10th, 1917, giving the manufacturer's number on this locomotive as 1106. Please advise further.

Yours very truly,

(Signed) G. S. Andersen

A/S

10-3-B-3 - EQUIPMENT - Locos.
Utah Ry. #1 (old C.V. #101).

101

656

April 18th,

1 9 1 9.

Mr. J. E. Stevenson, Superintendent,
Utah Railway Company,
Provo, Utah.

Dear Sir:

In accordance with your request of the 4th instant, I am enclosing herewith one photostat copy of specifications No. 1725, and which I note from your letter is for engine No. 1.

Yours very truly,

(Signed) G. S. Anderson

A/S

Form 90

UTAH RAILWAY COMPANY

920 NEWHOUSE BUILDING

ADDRESS REPLY TO
O. J. EGLESTON, CHIEF ENGINEER
P. O. BOX 1785

SUBJECT: UTAH RAILWAY-MISCELLANEOUS

SALT LAKE CITY, UTAH, April 17, 1919

UTAH RAILWAY COMPANY,
RECEIVED
APR 17 1919

Mr. G. S. Anderson,
V.P.& G.M., Utah Railway Co,
Building.

Dear Sir:

Complying with your request of April 7th, we are attaching herewith one photostat copy of set of specifications #1725, class 2-8-0 Lima locomotive, we are also returning herewith the original copy of specifications sent with your letter.

Yours very truly,
ENGINEERING DEPARTMENT
BY
ENGINEER.

APS/AW

Encs.

10-3-B-3 - EQUIPMENT - Locos.

April 7, 1919.

Mr. O. J. Egleston, Chief Engineer,
Utah Railway Company,
Building.

Dear Sir:

I enclose herewith one set of specification No. 1725 of the Lima Locomotive & Machine Company. Will you please have on photostat copy made and mail to me together with the original.

Yours very truly,

(Signed) E. S. Anderson

A/S

UTAH RAILWAY COMPANY
OPERATING DEPARTMENT
PROVO, UTAH

J. E. STEVENSON
SUPERINTENDENT AND MASTER MECHANIC

April 4th
1919

BE SAFE
UTAH
U.C.R.
RAILWAY
ALWAYS

UTAH RAILWAY COMPANY
RECEIVED
APR 7 - 1919

Mr. G. S. Anderson,
Vice Pres. & General Mgr.,
Utah Railway Company,
Salt Lake City, Utah.

Dear Sir:

Herewith return of Lima Locomotive Machine Company's blue prints, which I find on examination to be specifications of our engine No. 1. 1725 is the manufacturer's number on engine 1 and the specifications correspond with the data we have.

Would appreciate having these prints photostated for our office file.

Respectfully,

JEStevenson

Superintendent.

JES*PC

UNITED STATES FUEL COMPANY
KEARNS BUILDING
SALT LAKE CITY, UTAH

UTAH RAILWAY
RECEIVED
APR 3 1919
THOS. SCHOTT, Agent.

UTAH RAILWAY COMPANY
RECEIVED
APR 1 - 1919

March 31st, 1919.

Mr. G. S. Anderson, VP & GM
Utah Railway Company,
Salt Lake City, Utah.

Dear Sir:

Enclose herewith Specification No. 1725 of the Lima Locomotive & Machine Company, covering one of the locomotives formerly owned by the Southern Utah Railroad Company. This specification may or may not cover one of the engines purchased by your company, and is sent to you for such disposition as you may care to make of same.

Very truly yours,

G H Holmes

For Vice President.

Do these specifications fit either the 1, 2 or 3

4/1/19

Eng No 1

July 15th

1 9 1 9

Mr. J. E. Stevenson, Master Mechanic,
Utah Railway Company,
Provo, Utah.

Dear Sir:

I enclose herewith specification of the Lima Locomotive Works purported to cover our locomotive No. 1.

Will you please check this specification and if it conforms to the locomotive, I will have a copy made for your file and record.

I note that the specifications show the weight on drivers as 129,000#, whereas you recently advised me that the weight on drivers is 132,400#. What changes have been made to increase the weight.

Yours very truly,

(Signed) G. S. Anderson

A-M

UTAH RAILWAY COMPANY
OPERATING DEPARTMENT
PROVO, UTAH

J. E. STEVENSON,
SUPERINTENDENT

#1

September 2nd,

1 9 1 8.

Mr. I. H. Luke,
Vice-Pres. & Gen. Mgr.,
Salt Lake City, Utah.

Dear Sir:

I am in receipt of a copy of a letter to Mr. W. F. Merry from Mr. Kellogg, advising that General Manager has authorized to build fire box for engine 1 as per letters attached from Mr. Stevenson and Paepke, also blue prints covering. He advises that they may arrange to go ahead and build fire box for us.

Respectfully,
J E Stevenson
Supt.

JES*VS

RECEIVED
SEP 3 - 1918
UTAH RAILWAY CO.
Gen. Mgr's. Office.

October 8th, 1917.

Mr. W. B. Rosser,
Hiawatha,
Utah.

Dear Sir:

About one month ago the Denver & Rio Grande shipped to you at Hiawatha flues for C. V. Engine 103 which you had sent to Salt Lake for tipping. Will you please advise if you received the amount of flues you should have received on the return shipment, and if they were in good shape. We are anxious to get our records clear on this matter.

Yours very truly,

General Manager.

10-3-B-3 - EQUIPMENT - Locos.

100M—4-17 Form 2835

The Denver and Rio Grande Railroad Co.

SHIPPING MEMORANDUM COMPANY MATERIAL

S L Station 8-8 1917

Shipped to D. & R. G. R. R. CO. Utah Ry. Co.

Care of J. H. Luke Title Supt.

At Hiawatha State Utah

Car Number 82908 Initial D&RG

H. [illegible] Storekeeper

REQUISITION NO.	QUANTITY	DESCRIPTION OF MATERIAL	WEIGHT
9th	330	Hinges 12	870
		Collect	
		Lon 5-2 to Helper	
		Then Re-billed to	
		Hiawatha	
101760		on Lauser #6	

If above articles received, sign and return to shipper.

Date ________ *Consignee* ________

If any damage or shortage exists, advise at once, returning this form.

RECEIVED AUG 15 1917

PANY

LOCATIONS OF MINES
BLACK HAWK, UTAH
HIAWATHA, UTAH
MOHRLAND, UTAH
PANTHER, UTAH

NT.

st 13th, 1917.

,

H.

our letter of August

ocomotive Inspection

o Out of Service

aken out of service

rts so that yOu can

,

ster Mechanic.

FORM 35.

GENERAL OFFICES
KEARNS BUILDING
SALT LAKE CITY, UTAH

UNITED STATES FUEL COMPANY

MECHANICAL DEPARTMENT.

LOCATIONS OF MINES
BLACK HAWK, UTAH
HIAWATHA, UTAH
MOHRLAND, UTAH
PANTHER, UTAH

Hiawatha, Utah, August 13th, 1917.

Mr. I. H. Luke,
General Manager -Utah Railway Co.,
Salt Lake City, U T A H.

Dear Sir:-

Complying with request of your letter of August 3rd, I am enclosing herewith Monthly Locomotive Inspection and Repair Reports for Engine 101, also Out of Service Report in as much as this engine was taken out of service yesterday. I am mailing the two reports so that yOu can file which ever one you desire.

Very truly yours,

R.G.Gass

General Master Mechanic.

UTAH RAILWAY COMPANY,
RECEIVED
AUG 15 1917

BOILER
INSPECTION REPORT
Form 195.

L. B. BRAINERD, PRESIDENT AND TREASURER.
F. B. ALLEN, VICE-PRESIDENT. C. S. BLAKE, SECRETARY. L. F. MIDDLEBROOK, ASSISTANT SECRETARY. W. R. C. CORSON, ASSISTANT SECRETARY.

THE HARTFORD STEAM BOILER INSPECTION & INSURANCE COMPANY.

DENVER DEPARTMENT
920 GAS & ELECTRIC BLDG., DENVER, COLO.
T. E. SHEARS, GENERAL AGENT

President's Office,
RECEIVED
SEP 19 1917
Salt Lake City.

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY MAKES THE FOLLOWING REPORT OF THE CONDITION OF YOUR STEAM BOILER INSPECTED ON THE

1st day of September, 1917. Soren Anderson, Inspector

One Locomotive Type Boiler, on Locomotive # 101 in engine house at Hiawatha, Utah.

INTERNALLY # 1:

No scale was noted. No corrosion was noted. Braces and stays were sound or being renewed. Openings to attachments were clear. Tubes were all out. Dome cap was removed and all internal parts accesable for inspection.

EXTERNALLY:

The shell plates and heads were sound as far as could be seen, but old patch in right side of furnace was removed and new and larger patch put in its place to cover cracks at ends of old patch. Seams and tube ends were in good order and showed no leakage. The Steam Gauge was not tested. Blow-off-pipes and other appliances were in good condition.

Very truly,

Thos. E. Shears
General Agent.

Untied States Fuel Company
and Southern Utah Railroad
Salt Lake City, Utah

Mr Luke
RRB
ABW

Lewis
Some day when up in
Gibbons office get the Contract
would like to. See it
EM

File No 656

August 27, 1917.

Mr. E. J. Harris,
Master Mechanic, D. & R. G. R. R. Co.,
Salt Lake City, Utah.

Dear Sir:

I am having Engine #101 fixed up at Hiawatha, and if you will ship the material called for on attached requisitions to that point promptly, and charge to Southern Utah Railway, I will appreciate it very much indeed.

Yours very truly,

General Manager.

5011

THE DENVER AND RIO GRANDE RAILROAD CO.

UTAH RAILWAY COMPANY,
RECEIVED
AUG 25 1917.

Hiawatha 8- 1917

File No

Mr J H Sykes
Dear Mr. Sykes
attached requisitions would suggest you send to Mr Harris for Material to be shipped from D&RG's Stock for Eng 101. Thank you
W B Rosser

Approved

Signed W B Rosser

Approved

GENERAL SUPERINTENDENT

Title For

File No. 656

Form 5021—75M-1-17

SAFETY FIRST D&RG

THE DENVER AND RIO GRANDE RAILROAD COMPANY

REQUISITION FOR SUPPLIES

Requisition No. 802

Office Foreman

Sheet No. 3

To Mr E. J. Harris

Date 8-23 1917

Please furnish the following to W B Rosser *Title* For *At* Hiawatha

Class	AMOUNT On Hand	AMOUNT Due	Store Use	Amount Required	DESCRIPTION OF ARTICLES	Purpose	Shop or P. A. Order No.
	0	0		1	driving Spring same as sketch attached.		
					Old Spring to be turned in in Exchange.		

Approved

Signed W B Rosser

Approved
GENERAL SUPERINTENDENT

Title For

Form 5021—75M-1-17

THE DENVER AND RIO GRANDE RAILROAD COMPANY

REQUISITION FOR SUPPLIES

Requisition No. 802

Office R.H. Forman

Sheet No. 2

To Mr E J Harris

Date 8-23 1917

Please furnish the following to W B Rosser Title For At Hiawatha

Class	AMOUNT On Hand	AMOUNT Due	Store Use	Amount Required	DESCRIPTION OF ARTICLES	Purpose	Shop or P. A. Order No.
	0	0		1	Headlight turbine and		
					generator complete.	For	
						SU Ry Co	
	0	0		1	Ohio No 9. Injector	Eng	
						101	
					Old turbine now on		
					Engine and Injector to		
					be shipped to Salt Lake		
					in Exchange.		

Approved

Approved

GENERAL SUPERINTENDENT

Signed W B Rosser

Title For.

Form 5021—75M-1-17

THE DENVER AND RIO GRANDE RAILROAD COMPANY

REQUISITION FOR SUPPLIES

Requisition No. 802

Sheet No. 1

Office R.H. Forman

To Mr E J Harris

Date 8-23 1917

Please furnish the following to W B Rosser Title For At Hiawatha

Class	AMOUNT On Hand	AMOUNT Due	Store Use	Amount Required	DESCRIPTION OF ARTICLES	Purpose	Shop or P. A. Order No.
	0	0	0	2	cylinder Head Castings No D12957. For 20" cyl	For S.V. Ry Eng 181	
	50	0		150	copper flue ferrules 1 3/4 inside 2" outside 5/8" long.		
	10	0		50	1" x 10" Stay bolts		
	0	0		25	1 1/16 x 10" Stay bolts.		
	0	0		1	Casting for making 20" cylinder packing rings		

Approved

Approved
GENERAL SUPERINTENDENT

Signed W B Rosser

Title For.

File No 656

August 20th, 1917.

Mr. E. J. Harris, Master Mechanic,
Denver & Rio Grande Railroad Co.
Salt Lake City,
Utah.

Dear Mr. Harris:

In accordance with our conversation at Helper of recent date I am having shipped to you at Salt Lake City in D&RG car 16233 four hundred fifty (450) flues to have the ends welded on. Please have them all re-tipped fourteen (14) feet one (1) inch long and then re-ship them to me at Hiawatha, Utah.

Yours very truly,

General Manager.

CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

WESTERN UNION TELEGRAM

NEWCOMB CARLTON, PRESIDENT GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

Form 1201

CLASS OF SERVICE	SYMBOL
Day Message	
Day Letter	Blue
Night Message	Nite
Night Letter	N L

If none of these three symbols appears after the check (number of words) this is a day message. Otherwise its character is indicated by the symbol appearing after the check.

30
25
55

RECEIVED AT 147 MAIN ST., TRIBUNE BUILDING, SALT LAKE CITY, UTAH ALWAYS OPEN

File No

12PR R 26COLLECT

HIAWATHA UTAH 1120A AUG 18 1917

I H LUKE 47—55

818 KEARNS BLG SALTLAKE UTAH

BILLED TO E J HARRIS TODAY ON RIOGRANDE SIXTEEN TWO THIRTY THREE FOUR HUNDRED FIFTY FLUES PLEASE HAVE THEM RETIPPED FOURTEEN FEET ONE INCH LONG

W B ROSSER

1147AM

Lewis:
Ask Supt of Dept to
hurry this car
through. Write Mr.
E. J. Harris M. M. D&RG
saying as per our conversation
at Helper recently I have shipped to you
at Salt Lake in Rio Grande car 16233
four hundred fifty flues to have [illegible]
ends welded on. The
length is 14 feet
one inch
JHL

File No 656

Memorandum

Castle Valley engine No. 101: (February 8, 1917)

Now in service. New flue sheet was applied to this fire box at Salt Lake shops (D. & R. G.) R. side sheet has one patch about 18 x 5½, and is cracked out top of this patch will require to be extended, 30 small cks out from stay bolt heads plugged, also several flat headed stay bolts. This engine should give about 1 year more service.

(D. McIver, Boiler Foreman)

Helper, Utah, February 8, 1917.

Mr. A. James,
Asst Master Mechanic,

File No 656

Dear Sir:

As per your request, am herewith handing you conditions of engines on Castle Valley and Southern Utah railway:

Engine Shay #50, side sheets are corrugated both sides for 6 rows of stay bolts up from bottom and several cks out from staybolt heads. Flue sheet has 2 or 3 cks out from top row of flue holes to knuckle. Knuckle is down about 1½". Door sheet corrugated at bottom. Machinery fair condition. New master gears and pinions and other repair parts on hand to apply.

Engine 100 S.U., side sheet appear in good condition, slightly wavy. Flue sheet has been badly cut with heel of beading tool, however, this flue sheet is all right for another set of flues, as flues that are in this engine are very weak and will have to be renewed. Machinery poor. Tires are worn to the limit and will have to have new tires. However, this engine will be very easy to put back in service.

S.U. Engine 102: General condition of fire box very poor and should have new fire box at once. Side sheet are ck out both sides, cracks 2" to 8" long. Flue sheet is patched at top and in poor condition also flue holes are cracked out and plugs applied. This engine was taken out of service account of dangerous condition of fire box. Boiler good.

Castle Valley engine 103: Sold.

S.U. engine 104: Leased to Magna. 3/4 side sheet applied at Hiawatha about September, 1913. Flue sheet should be renewed account of knuckle being down and bridges plugged. Back end of crown sheet will have to be reinforced with another row of crown stays as the distance is too great from last row of stay to door sheet flange.

File No 656

Door sheet is mud burnt at both sides of fire door and 4 crack out from same.

Castle Valley engine 105: Right side sheet has crack 39" long near middle of the box, beginning at the mud ring and running up towards the crown sheet. This crack was no doubt caused by putting cold water in the boiler at Hiawatha through the blow off cock. There are also 30 other crack from ½ to 2" long on side sheets. several plugged. Back flue sheet has several cks at top flue holes and plugged and are actually dangerous. This fire box will have to be renewed. Machinery fair. Boiler good.

This for your information.

Yours trule,

(Signed) D. McIver,

Boiler Foreman

COPY

BOILER INSPECTION REPORT
(Form 197. 100M-6-14.)

L. B. BRAINERD, PRESIDENT AND TREASURER.
F. B. ALLEN, VICE-PRESIDENT. C. S. BLAKE, SECRETARY. L. F. MIDDLEBROOK, ASSISTANT SECRETARY. W. R. C. CORSON, ASSISTANT SECRETARY.

THE HARTFORD STEAM BOILER INSPECTION & INSURANCE COMPANY.

File No. 656

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY MAKES THE FOLLOWING REPORT OF THE CONDITION OF YOUR STEAM BOILER INSPECTED ON THE

25th day of June, 1916. By Inspector Soren Anderson.

One Loco. Firebox Boiler, location Locomotive No.101, Hiawatha, Utah.

INTERNALLY:

No scale or corrosion was noted. Braces and stays were sound as far as could be determined with exception that a great many stay bolts in furnace are without sufficient heads, and should be renewed, especially on right side. No Oil was found. Openings to attachments were clear.

EXTERNALLY:

The shell plates and heads were sound as far as could be seen with exception that fire sheets on right side are cracked and plugged between several stay bolts and should have patch installed where sheet is defective. Seams and tube ends were in good order. The steam gauge was tested on May 12, 1916 in Salt Lake shops. Blow-off-pipes and other appliances were in good condition. Setting and lining were in good order.

Very truly,

Thos. E. Shears
General Agent.

Per

Consolidated Fuel Co.,
Hiawatha, Utah.

File No 656

#9

71

June 28th, 1915.

Mr. A. B. Apperson, Gen'l Supt.,
Denver & Rio Grande R. R. Co.,
Salt Lake City, Utah.

Dear Mr. Apperson:-

With reference to the sale of some of our engines: The 101, you will remember, was put in good shape for sale to Mr. Eccles. It is still in the round house at Hiawatha, I think, and can be inspected there by intending purchasers. The engine should be worth $5,000. as it stands. We will be glad to sell any of the other engines on the basis of the valuation set by Messers. Bennett and Hickey - they were certainly very conservative in their es estimates.

Thank you very much for your trouble in this matter. I hope you can sell some of these engines for us. Do not believe there will be any trouble with reference to their being under the trust deed, as we will apply the proceeds of sale to the liquidation of the bonds.

Yours truly,

175
The Denver & Rio Grande Railroad Co.
Utah Lines
OFFICE OF GENERAL SUPERINTENDENT
Salt Lake City, Utah

President's Office,
RECEIVED
JUN 25 1915
Salt Lake City.

Denver, Colorado,
June 23, 1915.

File No 656

My dear E. L.

While fussing around in Denver last few days have found an opportunity to get rid of one of your engines, or possibly two or three of them. Believe that I can get between $4,500 and $5,000.for one of these locomotives, allowing enough off to put the engine in good condition. Parties desiring do not want to pay over $5,500 for engine. Some time ago you said you did not know whether these engines could be sold without first taking up with the trustees, on account of bond. However, by this time assume you have found out just what you can do. Wish you would please let me know at your earliest convenience.

I have now been in Denver ten days and have not seen a golf links. That's going some.

Kindest regards to Mrs. Carpenter and yourself.

Yours very truly,

A B Apperson

PERSONAL

Mr. E. L. Carpenter,
President, Consolidated Fuel Co.,
Salt Lake City, Utah.

P.S. Should be home latter part of this or early part of next week.

A.B.A.

Dictated.

File No 656

Salt Lake City, Utah.
Nov., 18th, 1914.

CONDITION OF ENGINE #101:

General condition good. Fire-box in good shape - no defect except two small cracks in the top of back flue sheet at flange but do not at present interfere with the good work of the engine. Tires and machinery good. The tail piece of the engine at deck is bent from contact with the tank connection. This was due to weak construction but will, however, last until the engine is overhauled, but she should render one year's service before overhauling, although she may require flues before that time. She is a good engine and should render good service for many months to come.

This engine is of the same size, weight and general dimensions as Engine 100 and the sale value could be based on the same plan; $5,000. selling price - to her owners she should be worth $6,800. She was sent through the Denver & Rio Grande shops for a general overhauling the latter part of March, 1914, and evidently placed in good condition. This engine is equipped with an electric headlight.

File No 656

Salt Lake City, Utah.
Nov., 18th, 1914.

CONDITION OF ENGINE #101:

General condition good. Fire-box in good shape - no defect except two small cracks in the top of back flue sheet at flange but do not at present interfere with the good work of the engine. Tires and machinery good. The tail piece of the engine at deck is bent from contact with the tank connection. This was due to weak construction but will, however, last until the engine is overhauled, but she should render one year's service before overhauling, although she may require flues before that time. She is a good engine and should render good service for many months to come.

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File No 656

49

Nov., 2nd, 1915.

Mr. R. M. Magraw,
General Superintendent,
Hiawatha, Utah.

Dear Mr. Magraw:

Confirming our personal conversation, please have Engine 101 set in the old Black Hawk yard alongside our other engines. In addition have the windows and cab boarded up and all bright parts blackened.

Also have the other engines looked over and see if everything is in good shape for winter - if not have them properly prepared for it. Charge the work to the Southern Utah Railroad, advising when the same has been accomplished.

Yours truly,

COPY

SOUTHERN UTAH AND CASTLE VALLEY RR CO'S

Statement showing Cost of Locomotives.

File No 656

SOUTHERN UTAH

Date Purchased	No.	Cost of Locomotive	see note Freight	Total Cost
Apr 1909	100	$11,000.00	$ 750.00	$11,750.00
Dec 1909	50	10,810.00	670.00	11,480.00
Aug 1910	102	13,155.00	773.72 ✓	13,928.72
Jan 1911	104	16,218.00	967.32 ✓	17,185.32
		$51,183.00	$3,161.04	$54,344.04

may include repairs & supplies in transit. ADS.

Ledger Balance - - - - - - - - - - - - - - - - - 53,807.85

Depreciation written off - - - - - - - - - - 536.19

CASTLE VALLEY

Date Purchased	No.	Cost of Locomotive	Freight	Total Cost
Sep 1910	101	11,523.25		11,523.25
Jul 1911	105	14,377.02		14,377.02
Feb 1912	103	13,642.60	818.30 ✓	14,460.90
		$39,542.87	$818.30	$40,361.17

Seggregation between cost of locomotives 101 and 105 and freight unobtainable, nor can contracts be located. Above figures are taken from ledger.

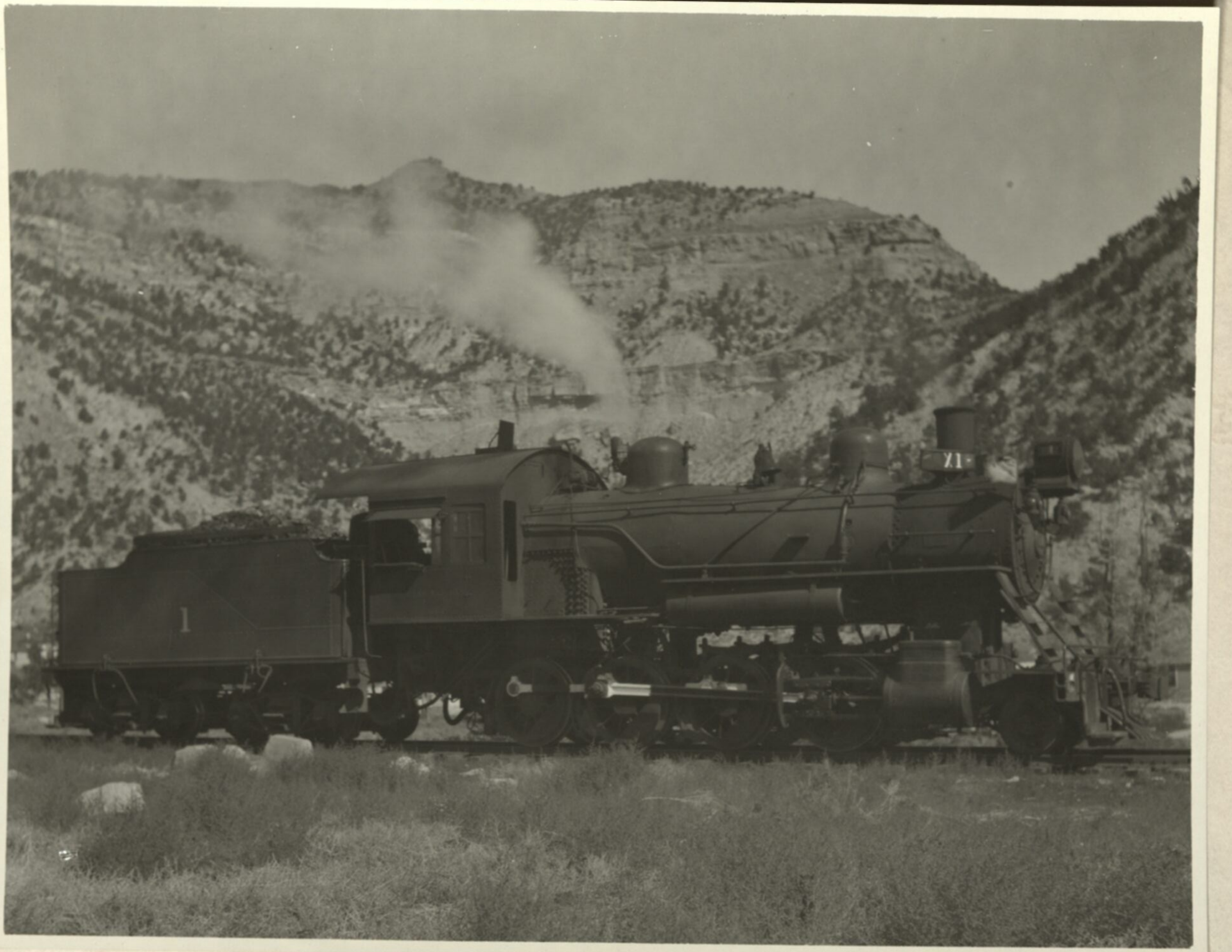
Contract price of locomotive 103 was $14,562.97, but this figure evidently included extra parts amounting to $920.37, which were charged to material and supply account.

All Southern Utah locomotives were purchased from Lima Locomotive Works.

Castle Valley locomotives 101 and 103 were purchased from the Lima Locomotive works and 105 from Baldwin Locomotive Works.

Salt Lake City.
October 21st, 1914.

Note by ADS 3/24/25
Freight rate on locomotives Lima Ohio to Utah Common points running on own wheels & pulled in train
Lima Ohio to Chicago 50% actual weight @ 16¢ cwt
Chicago to Utah Common points actual weight @ 6.80 net ton
Lima Ohio to St Louis 50% actual weight @ $0.20 cwt
St Louis to Utah actual wt @ 6.00 net ton
Total - 50% actual weight @ $0.84 cwt - 50% actual weight @ $0.80 cwt.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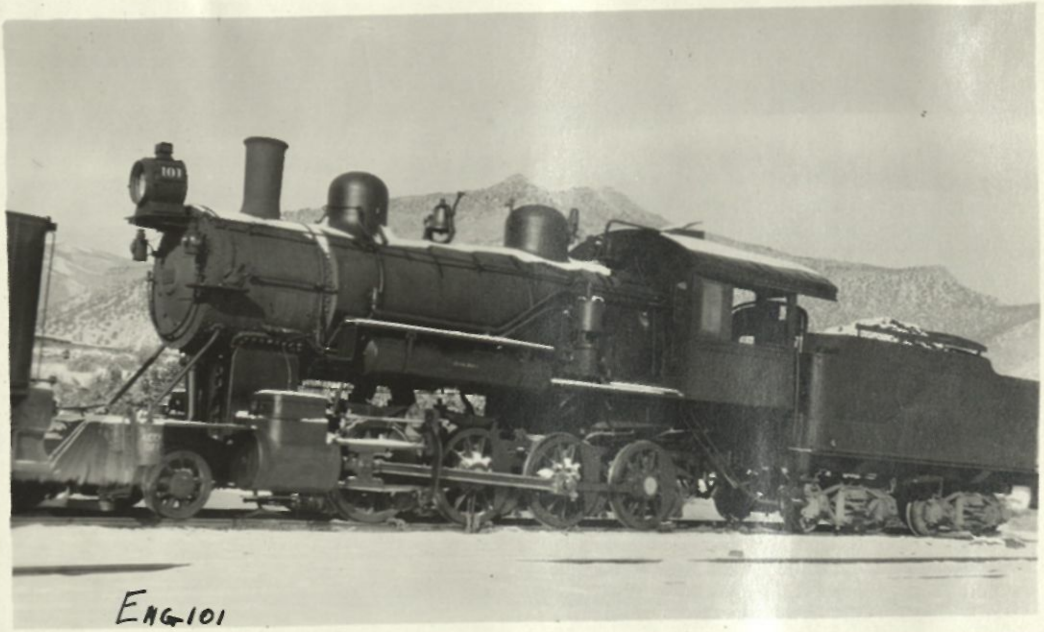
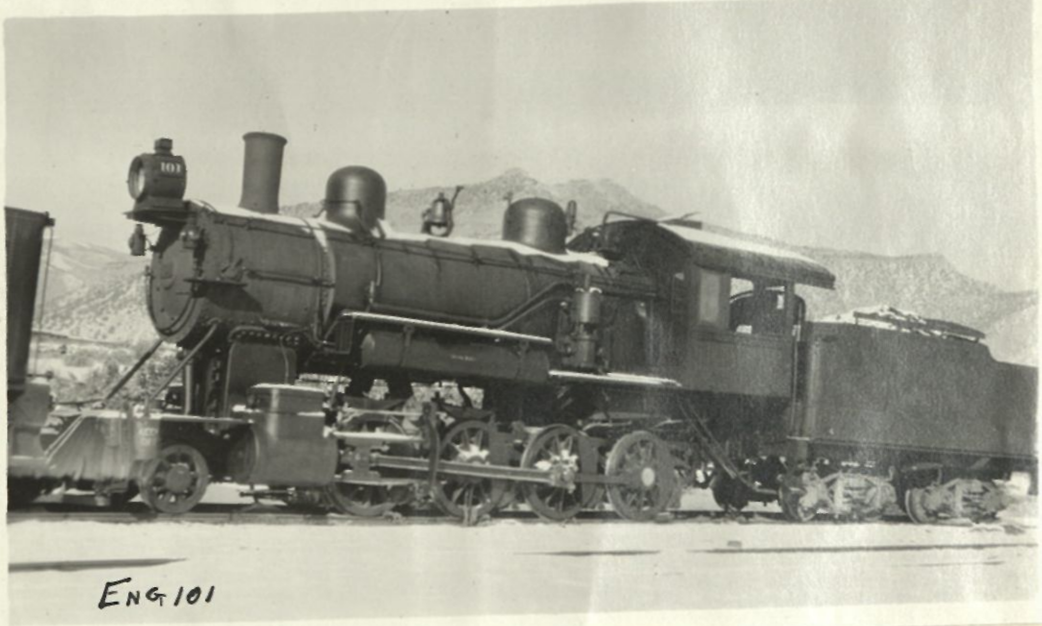
1

File No 656



ENG 101



ENG 101

Equipt
Utah Ry Eng #1